

Sit. Rep #01 - Departure 31 January 2010 **US AMLR Vessel Survey (***R/V Moana Wave***)** South Shetlands, Antarctica

After some delays in Punta Arenas to repair some engine problems that delayed our departure, the R/V Moana Wave departed to begin the 2010 AMLR cruise began approximately 0000 the 25th of Ianuary. The Southbound transit across the Drake was uneventful, with fair winds and seas allowing the ship to average approximately 10knts during the crossing. We arrived at station 02-01, at the most northeast sampling station around Elephant Island on the morning of 28 January. After several mechanical hiccups, three stations were sampled before weather halted sampling and the ship hid between Clarence and Elephant Island, to wait out a moderate (30+ knot; significant wave height ~15ft), easterly that brought strong snow. On January 30th, sampling resumed and we have been making slow but steady progress since. Both the scientific and ships crew are understanding the dance required to keep all the electronic, hydraulic and mechanical bits working together. Thus, efficiency, and therefore speed of operations is increasing. We are currently enroute to station 05.5-01, at the mid-line of the EI grid, and will cancel transect 4, in order to make up for lost time.

The weather reports for the next several days show a high pressure system west of Chile that should bring large swells from west, with strong winds. We are hopeful to finish, the exposed north stations along line 5, before the weather impacts our operations further.

We are anticipating a finish date of 6 February for the EI grid, and will then proceed to Cape Shirreff with sufficient days to resupply the camp with needed food, fuel and construction equipment.

Problems and Issues - The repair of the port engine Governor slowed sampling down owing to decreased vessel speed to 5 knots for 12 hours on the 30th. The hydraulics on the winch system continue to require tweaking but adjustments to ship speed during biological sampling have allowed the scientific and deck crew to operate.